Recombinant SPP2B protein (His tag)

Catalog Number	543227
Synonyms	SPP-like 2B; SPPL2b; Intramembrane protease 4; IMP-4; Presenilin homologous protein 4; PSH4; Presenilin-like protein 1
Species	Human
Expression System	E. coli
Accession	Q8TCT7
Molecular Weight	Predictes a molecular mass of 18.14 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	26-174
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 26-174 aa (Q8TCT7) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Signal peptide peptidase-like 2B (SPPL2b) Fragment (aa 26-174) is a high-purity protein designed for studying intramembrane proteolysis and signal peptide processing. This fragment includes the complete PA domain, making it an ideal tool for investigating specific domain functions in immune regulation and viral envelope glycoprotein maturation. Signal peptide peptidase-like 2B (SPPL2b) is an intramembrane-cleaving aspartic protease (I-CLiP) that cleaves type II membrane signal peptides within the hydrophobic plane of the membrane. It plays critical roles in the proteolytic processing of ITM2B and tumor necrosis factor-alpha (TNF), facilitating the release of intracellular domains for nuclear signaling. SPPL2b is implicated in regulating innate and adaptive immunity and processes viral envelope glycoproteins, such as simian foamy virus gp18, following prior ectodomain shedding. The protein localizes to multiple membrane compartments, including the cell membrane, Golgi apparatus, lysosomes, and endosomes, and is targeted through the secretory pathway to endosomes/lysosomes, underscoring its importance in intracellular signaling and protein maturation pathways.